Chapter 5

Posting

When a bridge is classified, it is assigned a bridge-classification number. This number represents the safe military load-carrying capacity of the bridge. Classifying units will post temporary classification markings on the bridges that they classify. If a nonengineer unit classifies a bridge, the responsible engineer unit will verify the classification as soon as possible and post the permanent bridge markings.

BRIDGE-CLASSIFICATION SIGNS

5-1. Do not post special classification numbers on standard bridge signs. Other signs, however, need to be placed where they will help maintain an even flow of traffic (Figure 5-1). Place signs indicating height restrictions on the center of the obstruction (the same as civilian signs). The minimum overhead clearance is 15 feet 6 inches. Place advance warning signs on bridge approaches. Theater commanders may make special arrangements to indicate obstructions that will affect exceptionally wide vehicles or a low overhead.

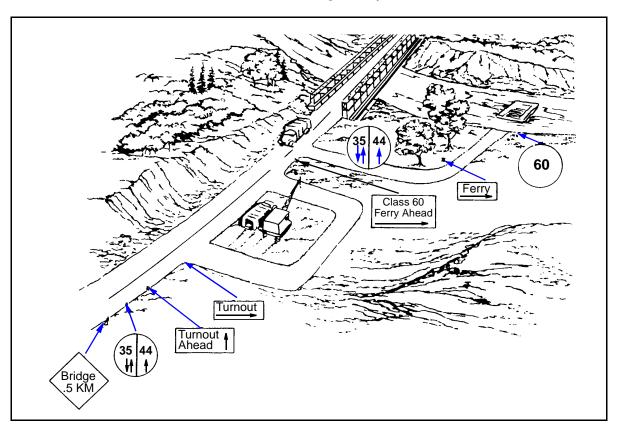


Figure 5-1. Standard Bridge Signs and Supplementary Signs

CIRCULAR-SHAPED SIGNS

5-2. All classified bridges in the TO are marked with circular signs to indicate the MLC. Place circular signs at both ends of the bridge so they are clearly visible to all oncoming traffic. These signs have a yellow background with black inscriptions as large as the sign allows. Circular signs come in two types—normal and dual-classification.

Normal

5-3. Signs for single-lane bridges are at least 16 inches in diameter (Figure 5-2). Signs for dual-lane bridges are at least 20 inches in diameter and are divided into right and left sections by a vertical line (Figure 5-3). The classification for dual-lane traffic is on the left half of the sign with two parallel vertical arrows beneath the number. The classification for single-lane traffic is on the right half of the sign with one vertical arrow beneath the number.

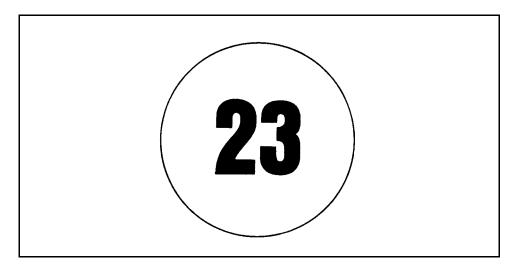


Figure 5-2. Typical Single-Lane, Bridge-Classification Sign

Dual Classification

5-4. A bridge may have a dual classification—wheeled and tracked. A special circular sign indicates both classifications (*Figure 5-4*). For single-lane bridges, a single sign (20 inches in diameter) is divided into two sections by a horizontal line. The top section shows the wheeled class, and the bottom section shows the tracked class. Symbols representing wheeled and tracked vehicles appear to the left of the corresponding class. For dual-lane bridges, two signs (20 inches in diameter) show the wheeled class on the top and the tracked class on the bottom. As with normal signs, the dual-lane class is on the left and the single-lane class is on the right. Symbols representing wheeled and tracked vehicles appear at the top of the corresponding sign.

5-5. Full NATO bridge signs (*Figure 5-5*, *page 5-4*) are used to standardize double-flow bridges. The sign has a yellow background with black inscriptions. It is one square meter and contains a circle with a diameter of 20 inches. The right and bottom sides of the circle are 10 inches from the right and bottom

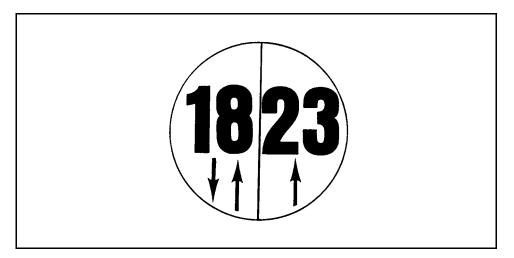


Figure 5-3. Typical Dual-Lane, Bridge-Classification Sign

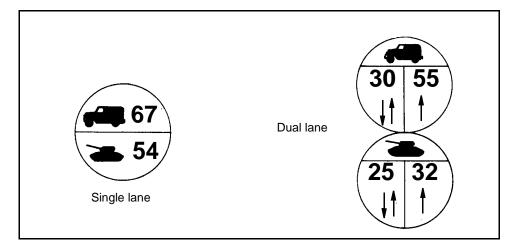


Figure 5-4. Typical Dual-Lane, Bridge-Classification Sign

edges of the square sign. The circle is divided into equal thirds. A small circle is centered in the upper third. The left half of the small circle is shaded and shows the two-way wheeled-vehicle classification. The right half of the small circle is unshaded and shows the one-way wheeled-vehicle classification. A small rectangle is centered in the middle third of the symbol. The left half of it is shaded and shows the two-way tracked-vehicle classification. The one-way tracked-vehicle classification is shown at the right of the unshaded side of the rectangle. The bridge serial number is shown in the lower third of the symbol, the bridge width is placed below the symbol, and the overall bridge length is shown at the right of the symbol.

Temporary

5-6. Temporary signs are posted to show expedient classifications. Post them as indicated in *Chapter 3* and *Appendix B*.

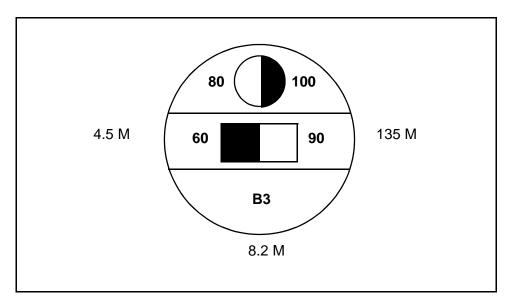


Figure 5-5. Full NATO Bridge Sign

RECTANGULAR-SHAPED SIGNS

5-7. Place rectangular signs (other than those indicating height restrictions) immediately below the circular signs. Rectangular signs show additional instructions and technical information. The signs are a minimum of 5×16 inches and have a yellow background with black inscriptions as large as the sign allows. Separate signs show height or width restrictions (Figure 5-6). Height and width signs are not required on bridges where civilian signs clearly show the necessary information. Use international height and width signs in countries that conform to the Geneva Convention of 1949. Restrictions may be in English, metric, or both units of measure. The units of measure used must be clearly indicated on the sign.

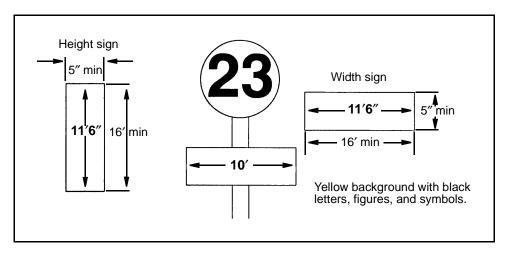


Figure 5-6. Height and Width Signs

MUTILANE SIGNS

5-8. Bridges with three or more lanes must have postings for each lane. Minimum widths for the respective MLC (*Table 3-4, page 3-18*) determine the number of lanes. Heavier loads can often be carried on a restricted lane, such as the center lane of a bridge or the line of rails on a combination road and rail bridge. In such cases, each lane has a bridge-classification sign. Rectangular multilane signs indicate the location and type of traffic allowed to use the restricted lanes (marked by paint, studs, or barricades) (*Figure 5-7*).

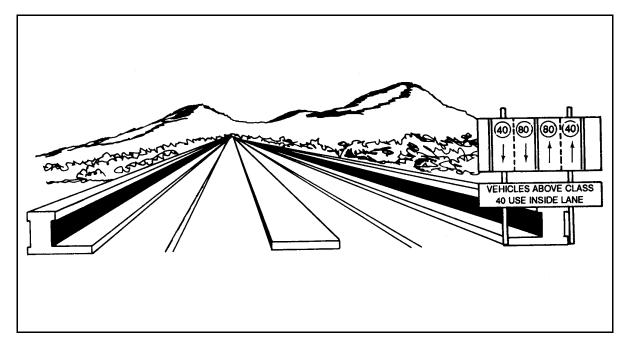


Figure 5-7. Typical Classification and Regulatory Signs for Multilane Bridges

TRAFFIC CONTROLS

5-9. Different types of traffic controls are established for different crossings. The paragraphs below discuss traffic controls for normal and special crossings.

NORMAL CROSSINGS

5-10. Normal crossings are possible when the vehicle's classification number is equal to or less than the bridge's classification number. Normal convoy discipline is imposed with a minimum spacing of 100 feet and a maximum speed of 25 miles per hour (mph).

One Way

5-11. One-way crossings are possible when the vehicle's classification number is equal to or less than the classification number posted on a single-lane bridge. If a one-way crossing on a dual-lane bridge is necessary, oncoming traffic is stopped and the vehicle is driven down the middle of the roadway.

Two Way

5-12. Two-way crossings are possible when the vehicles' classification number is equal to or less than the dual-lane classification number of a multiple-lane bridge. Dual-lane traffic may be in the same or in opposite directions.

SPECIAL CROSSINGS

5-13. Under exceptional conditions, the theater commander may authorize vehicles to cross bridges when the bridge's classification number is less than the vehicle's classification number. These special crossings carry restrictions on vehicle speed and spacing (*Table 5-1*). Special crossings are limited to caution and risk crossings and are not posted on standard bridge signs.

Caution

5-14. Obtain the caution classifications for nonstandard fixed bridges by multiplying the normal one-way classification number by 125 percent. Obtain caution classifications from published NATO data for standard, prefabricated fixed and floating bridges. *Table 5-1* outlines these restrictions.

NOTE: Consider AFCS bridges as nonstandard for the purposes of special crossings.

Risk

5-15. Obtain risk classifications from the published data for standard, fixed and floating bridges. Risk crossings are not made on nonstandard fixed bridges. These crossings are made only in emergencies when authorized by the responsible commanders. *Table 5-1* outlines restrictions on travel under risk conditions. A qualified engineer officer must inspect the bridge for signs of failure after each risk crossing. Damaged parts must be replaced or repaired before the bridge is reopened.

Table 5-1. Special-Crossing Considerations

Considerations	Type of Crossing		
	Normal	Caution	Risk
Classification	As posted	Standard bridges: as published	Standard bridges: as published
		Nonstandard bridges: 125 percent of normal one-way classification	Nonstandard bridges: no crossing
Spacing	100 feet	150 feet	One vehicle on bridge at a time
Speed	25 mph	8 mph	3 mph
Location	In lane	Bridge centerline	Bridge centerline
Other	None	No stopping, braking, or accelerating	No stopping, braking, or accelerating; inspect the bridge after each crossing